

2010 Economic Impact Survey of Visitors to Montana State Parks

December 2010

PREPARED BY:

Bureau of Business and Economic Research The University of Montana – Missoula Missoula, Montana 59812 PREPARED FOR: Montana State Parks 1420 East Sixth Avenue P.O. Box 200701 Helena, MT 59620-0701





Acknowledgements

Vigorous thanks must go to the following individuals for the effort they put forth to make this project a success:

Chas Van Genderen, Montana State Parks Administrator, Roger Semler, Montana State Parks Field Operations Assistant Administrator, Sue Dalbey, Montana State Parks Outdoor Recreation Planner, and especially Montana State Parks Managers and Staff.

Thanks also go to Dr. Patrick Barkey for the patience and good humor he displayed during this project. Jim Sylvester and Janet Stevens of BBER worked diligently to supervise the data collection of this study. Finally, we are most grateful to the BBER telephone survey supervisors and interviewers. Their dedication to careful research and persistence made this study a success.

Table of Contents

Acknowledgements	2
Table of Contents	3
Executive Summary	4
Chapter 1: Respondent Characteristics and Visitor Group Characteristics	9
Introduction	9
Reading this Report	
Trip Characteristics	
Selected Observations by Region	13
Chapter 2: Expenditure Profiles of Park Visitors	16
Expenditure Patterns in Montana	
Total Spending	22
Chapter 3: Economic Impact of Nonresident Visitation	25
Non-Resident Economic Impacts	
Conclusion	
Chapter 4: Possible State Park Funding Preferences	29
Intensity of Support or Opposition among Residents	
Intensity of Support or Opposition among Nonresidents	33
Vehicle Registration Fee	36
Chapter 5: Visitor Satisfaction	37
Selected Observations by Region	40
Chapter 6: Visitor Likes and Dislikes	41
Chapter 7: Visitor Activities	43
Selected Activity Participation by Region	44
Chapter 8: Survey Methods	46
Objective	46
Survey Design	46
Questionnaire Development	46
Sampling	
Survey Administration	
Data Set Preparation and Reporting	
Modeling Methodology	50
Appendix: Ouestionnaire	A1

Executive Summary

Montana is a state of stunning physical beauty and outstanding recreational opportunities. Those opportunities bring visitors to the state from far and wide, enjoying our trails, rivers, and mountains and supporting a diverse and vibrant spectrum of economic activity in the process. In order to better understand and assess the experience and economic impact of resident and non-resident visitors, the Montana State Parks contracted with the Bureau of Business and Economic Research at The University of Montana (BBER) to conduct a comprehensive, survey-based assessment of state park visitors during the summer of 2010. This report details the findings of this project.

Based on information gathered from 1,100 completed interviews with visitors to 27 Montana State Parks, and utilizing a state-of-the-art analytical model of the economy of the State of Montana, this report finds that:

- Nonresident visitors to state parks spent 122.3 million dollars and produced 1,600 jobs in Montana in 2010,
- Park visitors were more satisfied with park staff service and facilities in 2010 than in 2002,
- Between 67.7% and 77.7% of resident visitors supported raising the current optional vehicle registration fee from \$4.00 per year to \$5.00 \$7.00 per year.

The fundamental conclusion of this study is that Montana State Parks represent an invaluable resource for the economy of Montana's regions, as well as the state as a whole. Satisfaction with the park experience, usage of parks, and spending as well as ultimate economic impact, continues to grow. Clearly the parks will continue to play an important role in the economic health of the state.

This executive summary presents a brief description of the study and then lists a few of the more important findings. Readers can use this executive summary to obtain a quick snapshot of this study's results. Detailed results and analysis are fully presented in the main body of the final report.

Survey Methods

Montana State Parks needed current data on the economic impact visits to its parks have on Montana. Montana State Parks also needed to learn about visitor satisfaction and the demographic characteristics of visitors to Montana State Parks, as well as gauge visitor preferences for state park funding options. Bureau of Business and Economic Research (BBER) at The University of Montana-Missoula developed and administered a telephone survey to provide Montana State Parks with this information. Continuity in design with a previous version of this study conducted in 2002 was required to maintain result comparability so that trends could be analyzed.

The survey was administered from June 1, 2010 through October 7, 2010. The population sampled was all visitors to 27 Montana State Parks. Respondents were sampled by Montana State Parks staff using an in-person intercept process to collect contact information during three data collections periods: an early season period (June 1-6), a mid-season period (June 30- July 12), and a late season period (August 20 – September 3). BBER used the contact information to conduct telephone interviews with sampled park visitors. Park visitors completed 1,100 interviews: 573 with residents and 527 with nonresidents. The response rate for the survey was 54.8%. The overall sampling error rate for this survey was +/- 3.0%. This means that if the survey were conducted 100 times, the proportions of responses found in 95 of the survey replications would be within 3% of those found by this survey. The sampling error rate was +/- 4.1% for residents and +/- 4.3% for nonresidents.

Visitor Group Characteristics

The average length of stay for state park visitor groups did not change in 2010 when compared to 2002 (see Figure E.1). A majority of resident visitor groups (53.6%) make day trip visits to a state park, though 46.4% stay at least one night. In contrast, nonresident visitor groups spend two nights when they visit a state park. Median number of nights stayed is reported here because it is less sensitive than the mean to the influence of a small number of very long park stays. Non-resident overnight stays have an

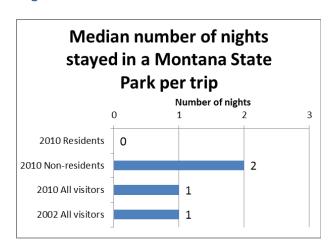
Figure E.1

important impact on Montana's economy, as will be described below.

The overall size of vehicle groups in 2010 (3.4 people per vehicle) increased over 2002 (2.1 people per vehicle). An average vehicle occupied by residents visited a state park carrying 3.5 people in 2010, while a vehicle occupied by nonresidents carried 2.9 people in 2010.

Economic Impact of Non-Resident Visitation

Montana State Parks had over 1.9 million visitors in 2010. This represents a 50 percent increase over park visitation in 2002.



But among resident and nonresident users of Montana State Parks, only residents increased their use of state parks. Compared to 2002, resident visitation increased nearly 79 percent, while nonresident visitation decreased by 16 percent.

Total spending attributable to resident and nonresident visitors was over \$289 million, up considerably (35 percent) from 2002 when park visitors spent \$214 million. All 2002 spending figures cited here are adjusted for inflation to 2010 dollars. Primarily responsible for the increased spending is higher expenditures per group for both resident and nonresident visitors, larger group sizes, and the 79 percent increase in resident visitation to Montana State Parks.

IMPLAN was again used to model the economic impact of nonresident spending in Montana that was attributable to state park visitation. Increased sample size and improved modeling capabilities allowed for more Montana State Parks region-specific analysis.

Similar to the 2002 study, only nonresident spending is used to determine the economic impact of Montana State Parks. Nonresident spending in 2010 was \$122.3 million.

At the statewide level, nonresident park visitors spent \$122.3 million, and in the process, created nearly 1,600 jobs, \$41.5 million in labor income, and over \$126.7 million in industry sales. The economic impact of nonresident park users in the 2002 study was considerably less, after adjusting for inflation. Nonresident park visitors in 2002 contributed to 1,170 jobs, \$28 million in labor income, and \$97.3 million in industry sales. Higher group expenditures, and more visitors per group, offset reduced park attendance and shorter lengths of stay per group to increase employment by 36 percent, labor income by 48 percent, and industry sales by 30 percent when compared to the 2002 nonresident park spending.

Approximately 60 percent of nonresident spending occurred outside a 50-mile radius from the parks. Hence the ability of Montana State Parks to provide economic opportunities throughout the entire state is evident, since nearly 60 percent of the total impact for employment, labor income and sales likewise occurred at least 50 miles outside the parks.

Not all Montana State Parks Regions shared equally in the economic opportunities (see Table E.1). Differences in the number of state parks located within each region, expenditures, group size, and average length of stay contribute to differential impacts by Montana State Parks region. Impacts also differ between regions because there are different activities and facilities available at different parks.

Table E.1

Economic Impact of Montana State Park Visitation by Region						
Montana State	Nonresident					
Parks Region	Spending	Employment	Labor Income	Sales		
1	\$37,934	454	\$11,997	\$36,361		
2	\$22,480	288	\$7,471	\$22,591		
3	\$21,993	293	\$7,549	\$23,289		
4/6	\$10,984	177	\$4,488	\$13,937		
5	\$18,202	240	\$6,326	\$19,492		
7	\$10,733	140	\$3,672	\$11,007		
All Montana State	\$122,326	1,592	\$41,503	\$126,677		
Parks Regions						

Source: IMPLAN. All dollars in thousands.

Table E.1 above distributes the total economy-wide impacts for jobs, labor income, and industry sales resulting from state park nonresident visitor spending. Montana State Parks Region 1, with almost a quarter of the state's parks, captures \$37.9 million, or 31 percent of total nonresident spending. It follows then that Region 1 would benefit the most in terms of jobs, income, and sales. Nearly all Region 1 parks offer camping, which encourages longer visitor stays, and Region 1 has a higher proportion of nonresident visitors than other regions.

Possible State Park Funding Preferences

Resident park visitors expressed a broad range of clear preferences for future measures that could be used to fund operations and maintenance of state parks. The largest majority of resident park visitors supported these four items:

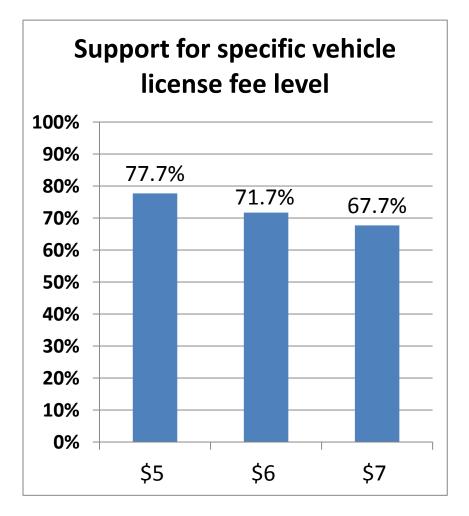
- 1. Increase use of volunteers (90.7% support),
- 2. Designating a portion of existing state taxes to parks (80.2% support),
- 3. Increasing park revenues by expanded sale of items such as firewood, ice, T- shirts and artwork (80.2% support), and
- 4. Enforcing user fee compliance more strictly (71.8% support).

The largest majority of resident park visitors opposed these four items:

- 1. Cut back on park maintenance and services (86.2% opposition),
- 2. Cutting back on public safety or enforcement of regulations (like quiet hours or littering) (84.5% opposition),
- 3. Privatizing state parks (79.3% opposition), and
- 4. Laying off employees (79.0% opposition).

Between 67.7% and 77.7% of resident park visitors supported raising the current optional vehicle registration fee from \$4.00 per year to \$5.00 - \$7.00 per year (see Figure E.2). More than three-fourths of residents (77.7%) supported raising the fee to \$5.00, and more than two-thirds of residents (67.7%) supported raising the fee to \$7.00.

Figure E.2 Resident Support for Raising Optional Vehicle Registration Fee

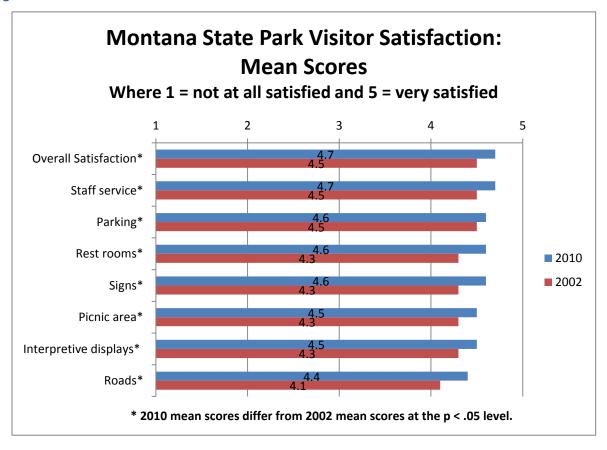


A slim majority of resident park visitors (53.0%) supported changing the optional Montana vehicle registration fee that allows for unlimited day use of state parks to a required fee, while 38.1% opposed making the fee a required fee. The remaining 8.9% were neutral about the change or answered that they didn't know.

Visitor Satisfaction

Park visitors were more satisfied with park staff service and facilities than in 2002 (see Figure E.3). Visitors rated their satisfaction on a one to five scale where one is not at all satisfied and five is very satisfied. Figure E.3 displays a selection of the eighteen features rated by park visitors, all of which were rated higher in 2010 than in 2002. None of the eighteen were rated lower.

Figure E.3



Chapter 1: Respondent Characteristics and Visitor Group Characteristics

Introduction

Montana State Parks needed current data on the economic impact visits to its parks have on Montana. Montana State Parks also needed to learn about visitor satisfaction and the demographic characteristics of visitors to Montana State Parks, as well as gauge visitor preferences for state park funding options. Bureau of Business and Economic Research (BBER) at The University of Montana-Missoula developed and administered a telephone survey to provide Montana State Parks with this information. Continuity in design with a previous version of this study conducted in 2002 was required to maintain result comparability so that trends could be analyzed.

Reading This Report

This report is divided into two parts, the main narrative of the report and the appendix. The main narrative presents the findings of this study. The second part contains the appendix which presents the final language used in the telephone interview. Detailed crosstabulations for questions included in the study and documentation of the verbatim responses to open-ended questions are published under a separate cover.

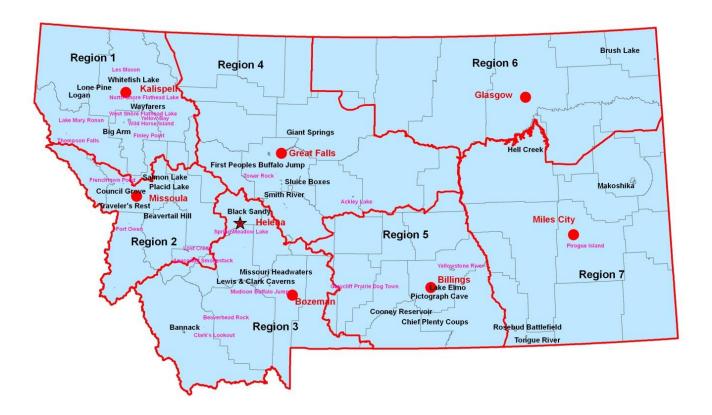
Many results in this document are presented in terms of percentages of responses; for instance, based on survey results 77.7% of resident visitors to Montana State Parks said they support increasing the optional vehicle registration fee that allows for unlimited day use of State Parks from \$4.00 to \$5.00. In some cases BBER cites mean scores for responses; like, based on a scale from one to five, where one is not at all satisfied and five is very satisfied, the mean score for overall satisfaction with Montana State Parks was 4.7 among park visitors. In a few instances medians are reported instead of means. Medians and means are two different types of average or measures of central tendency. A median is simply the value where 50% of the responses are greater than the value and 50% of responses are below the value. A mean is the simple average of all of the values. Medians are useful because, unlike means, they are not influenced too much by extreme values in the data.

Differences in percentages or mean scores cited in the remainder of this report are significant at the 95 percent confidence level unless otherwise stated. This means that if the survey were replicated 100 times, the difference cited would be found in at least 95 of the replications. Differences were evaluated by calculating the confidence intervals around point estimates or by using tests of independence.

Data in this report are presented by Montana State Park regions. These regions are defined in Figure 1.1 below. Region 6 was combined with Region 4 for reporting purposes since there is only one State Park in Region 6, Brush Lake. Unless otherwise noted below, the phrase "group size" refers to vehicle group size when used throughout this report.

This report uses total park visitor percentages when making comparisons between 2002 and 2010 for trend comparisons on items other than economic impact analyses. This is because the 2002 study report does not provide separate resident and nonresident observations for park visitors that exclude fishing access site visitors. Wherever a phrase like "in or near a state park" or "park vicinity" is used in this report it means within 50 miles of a state park.

Figure 1.1: Map of Montana State Parks Administrative Regions (parks in bold were included the survey)



Trip Characteristics

Montana State Park visitors were asked a series of questions about their trip summarized in Table 1.1 below. As expected there are significant differences between resident and nonresident park visitors.

A majority of resident visitor groups (53.6%) make day trip visits to a state park, though 46.4% stay at least one night. In contrast, nonresident visitor groups spend two nights in or near a state park. When medians are reported here, it is because they less sensitive than a mean to the influence of a small number of extreme values. For instance, the small number of visitors from Europe travelled a great distance to visit a state park and their one-way travel distance from home skews the mean considerably.

Montana residents travel a median of 42 miles from home and the state park was the only destination for nearly three quarters of the respondents and the primary destination for another 37%. The park visit was the first for just under 30 percent of the resident visitors.

Nonresident visitors spent nearly seven days in Montana on average. The median distance they traveled was about 700 miles in order to reach the park they visited. Only 16 % said the park was their only destination and 12% said it was their primary destination.

The mean number of nights spent in Montana in 2010 (3 nights per trip) declined from the 2002 level (4.8 nights per trip), but the number of nights spent in or near a state park did not change in a statistically significant way.

Table 1.1 Trip Characteristics of Montana State Park Visitors: 2010 and 2002

		2010			2002
		Resident	Nonresident	Total	Total
Average nights in Montana	Mean	2.1	7.0	3.0	4.8
	Median	0.0	5.0	2.0	3.0
	% zero nights	51.4%	4.3%	43.0%	19.0%
Average nights in State Park	Mean	1.7	3.4	2.0	2.3
	Median	0.0	2.0	1.0	1.0
	% zero nights	53.6%	13.0%	46.0%	32.0%
Miles from home	Mean	82.2	976.9	240.0	276.0
	Median	42.0	707.4	60.0	300.0
Started from principal residence	% Yes	95.5%	83.4%	93.4%	91.0%
State Park was only destination	% Yes	71.4%	16.1%	61.6%	39.0%
If Park was one of several					
destinations, this Park was the	% Yes	37.3%	12.4%	27.8%	47.0%
principal destination					
First visit to State Park	% Yes	27.9%	72.2%	35.7%	50.0%

State park visitation is a family and friends affair. Only about 10 percent of resident visitors were alone, the rest were in groups of friends and family. Nonresidents were more likely to be in family groups. Couples made up about 45 percent of nonresident visitors. Group size for Montana residents was 3.5 persons compared to 2.9 persons for nonresident park visitors. In 2002 average group size for all visitors was 2.1 persons compared to 3.4 in 2010. The growth in average group size between 2002 and 2010 is statistically significant.

Table 1.3 below describes selected demographic characteristics of park visitors. The difference between household incomes for 2010 residents and nonresidents is noteworthy. A higher proportion of residents with household incomes under \$35,000 per year (20.2%) visit Montana State Parks than nonresidents with the same income level (8.9%). A greater fraction of nonresidents with household incomes at or above \$100,000 (24.1%) visit Montana State Parks than residents at the highest income level (12.4%). Readers should be aware of one methodological note when observing the household income data. The 2002 study report did not present the proportion of respondents who refused to answer the household income question, but 14.6% of 2010 respondents refused to answer. This makes comparing the 2002 and 2010 household income proportions an "apples and oranges" comparison that is probably of little value.

 Table 1.2 Group Characteristics of Montana State Park Visitors: 2010 and 2002

			2010		2002
			Non-		
		Resident	resident	Total	Total
Group description	Alone	10.0%	7.2%	9.5%	6.0%
	Couple*	22.7%	45.4%	26.7%	4.0%
	Family members*	42.3%	32.0%	40.5%	34.0%
	Group of friends*	11.9%	6.7%	11.0%	17.0%
	Family and friends	9.9%	8.2%	9.6%	21.0%
	Organized group or	2.3%	0.5%	2.0%	8.0%
	club				
	Business associates	0.8%	0.1%	0.6%	8.0%
Number of people	1	10.0%	7.2%	9.5%	8.0%
in vehicle	2*	34.5%	52.6%	37.7%	42.0%
	3*	16.6%	10.8%	15.5%	16.0%
	4	18.2%	16.5%	17.9%	17.0%
	5	9.5%	5.7%	8.8%	9.0%
	6+	11.1%	7.2%	10.5%	8.0%
Average vehicle grou	3.5*	2.9*	3.4	2.1	
* 2010 difference sig	nificant at p < .05 level				

Table 1.3 Demographics of Montana State Park Visitor Survey Respondents

				2002	
		Resident	Non- resident	Total	Total
Montana State	1	106	117	223	55
Parks Region by	2	104	85	189	81
Number of	3	78	78	156	154
Completed	4	124	90	214	37
Interviews	5	82	63	145	78
	7	7 9	94	173	111
	Total	573	527	1,100	516
Average Age		48.7	53.6	51.0	49.2
Sex (%)	Female	45.4%	46.7%	46.0%	49.0%
	Male	54.6%	53.3%	54.0%	51.0%
2009	< 35k*	20.2%	8.9%	14.8%	27.0%
Household	35k-49k	14.8%	11.2%	13.1%	20.0%
Income (\$)(%)	50k-99k	39.9%	38.9%	39.5%	36.0%
	100k +*	12.4%	24.1%	18.0%	14.0%
	Missing*	12.6%	16.9%	14.6%	NA
* 2010 difference	significant a	at p < .05 lev	el		

Selected Observations by Region

Nonresidents averaged about seven days in Montana during their trips that include a state park visit (see Figure 1.2 below). Visitors to Region 2 and 4/6 parks spent about nine days in Montana. These visitors also visited Glacier and Yellowstone National Park as part of their travels. Nonresident visitors to Region 7 parks were more local (from the region) and thus reported shorter visits. Major destinations were Tongue River Reservoir State Park by Wyoming residents and Makoshika State Park by North Dakota residents.

Figure 1.2

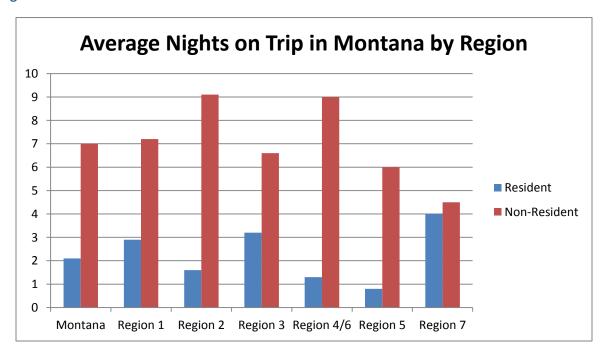
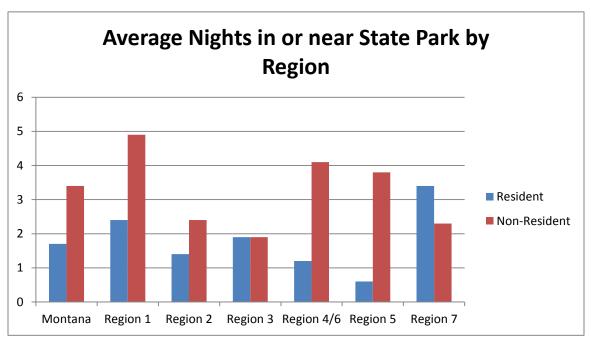


Figure 1.3 illustrates that nonresidents often spent more days in or near state parks per trip than did residents. Nonresident visitors to Region 1 State Parks spent nearly 5 nights in or near the state park they visited. Region 4 and 5 nonresident visitors spent about 4 days. Nonresident visitors to region 2, 3 and 7 state parks spent about 2 days.

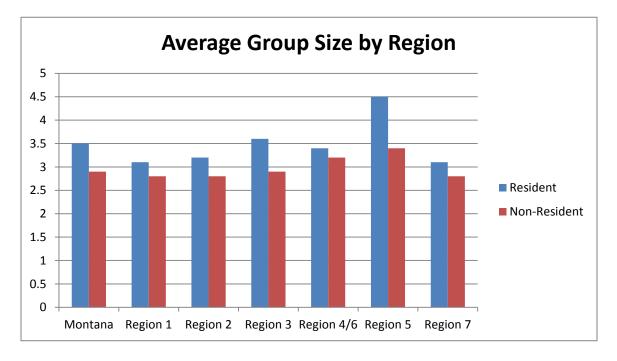
Visiting state parks in Region 7 is a multiday affair; residents spent over 3 days on average in or near the state park they visited. Tongue River Reservoir and Hell Creek State Parks were the destinations of most resident visitors; most of who came from the Billings area, a 2 to 4 hour drive.

Figure 1.3



Average group size by region was comparable to the state average of 3.5 with the exception of Region 5 resident visitors with a group size of 4.5 persons per vehicle (see Figure 1.4). Most resident park visits in this region were day use to Lake Elmo and Cooney Reservoir State Parks. These visits were dominated by family and friends traveling together.

Figure 1.4



Chapter 2: Expenditure Profiles of Park Visitors

Similar to the previous study "2002 Economic Impact Survey of Visitors to Montana's State Parks and Fishing Access Sites," conducted by the Bureau of Business and Economic Research for Montana State Parks, both resident and nonresident visitors expenditure patterns are identified according to two dimensions: 1) the proportion of expenditures spent locally at and around the state parks, and 2) the expenditures spent outside the park site. The expenditure patterns reported below are demarcated by type of use, day visitors and overnight visitors, and whether the expenditure was made in the park vicinity or while traveling around Montana. Data was not collected for Montana's fishing access sites in the 2010 study.

Expenditure Patterns in Montana

Table 2.1 below summarizes the daily expenditures for both resident and nonresident visitors to state parks. These expenditures represent spending by park visitors as they travel the state to and from the state parks visited. While not all of this spending is solely attributable to the state park, it nevertheless contributes to expenditures in the state that otherwise may not have been made. State parks help define a visitors route of travel, the number of days spent in Montana, and to some degree, where spending occurs as different retail opportunities exist around state parks from region to region.

Table 2.1 Resident and Nonresident Park Visitor Average Expenditures per Group per Day in Montana

	Resident	Resident daily	Nonresident sample	Nonresident daily
	sample size	expenditures	size	expenditures
Campgrounds/RV parks	275	\$10.02	499	\$8.53
Hotels/motels	275	\$5.57	499	\$27.88
Gasoline	573	\$21.61	527	\$31.88
Restaurant & bars	573	\$10.24	527	\$23.89
Groceries	573	\$14.80	527	\$14.51
Other retail	573	\$6.71	527	\$19.28
Guide and outfitter services	573	\$3.08	527	\$2.11
Transportation	573	\$1.67	527	\$6.90
Entrance fees	573	\$2.49	527	\$4.61
Licenses	573	\$1.68	527	\$2.63
Trip prep	573	\$16.97	527	\$1.47
Museums	573	\$.56	527	\$1.12
Auto repair	573	\$0.00	527	\$2.65
Total		\$95.40		\$147.45

Resident spending is about 65 percent of the average daily spending per group for nonresidents. Nonresidents spend substantially more on lodging, gasoline, and restaurants. Transportation fees and general retail are higher on average as well, all reflecting the generally higher dependence of nonresidents on tourism support services. Additionally, longer travel distances reported by nonresidents contribute to not only more days on the road, but also greater expenditures on everything from gas to lodging and meals. The median travel distance for residents was only 42 miles, compared to over 700 miles for nonresidents.¹ And nonresidents tend to move around the state more. Only 16 percent of nonresident visitors report that the park visited was their only destination, compared to almost three-

16

¹ Median miles are used here since nonresident travelers have wide ranges in mileage traveled. A few travelers coming from distant locations will skew the mean average considerably.

quarters of resident visitors to state parks. Resident visitors on the other hand spent slightly more on camping and incurred higher expenses preparing for their trip.

Relative to a similar study conducted during the 2002 tourism season, daily per group expenditures in real (inflation- adjusted terms) are up considerably in 2010. In 2002, resident park visitor expenditures per group per day were \$13.21 (2010 dollars) compared to \$95.40 today. Similarly for nonresident park visitor daily expenditures, \$79.09 in 2002 (adjusted again for inflation) compared to \$147.45 today. But according to the Institute for Tourism and Recreation Research (ITRR), average daily expenditures per group for nonresident travelers in 2009 were \$116.09, and in 2008, average daily expenditures per group were \$202.15 for nonresident vacationers. The average daily expenditures used in this study for nonresident visitors to Montana's state parks is \$147.45, reasonably within the average daily expenditures reported by the Institute for Tourism and Recreation Research. Changes in the Institute for Tourism and Recreation Research's 2009 sampling methodology contributed in part to the much lower daily expenditures. The average daily expenditures for nonresident vacationers, a subset of nonresident travelers, was \$119 for third quarter 2009 and \$117 for fourth quarter 2010, as reported by the ITRR. Tables 2.2 and 2.3 below show resident and nonresident spending in Montana according to whether the visitor spent a night in or near the park (overnight visitor) or visited the park only during the day (day visitor). Resident day users of the park spend considerably less per day in Montana than their resident counterparts who spend at least one night in or near the park site. Most of this lower average daily spending for resident day users is attributable to the lack of expenditures for campgrounds and lodging and much lower spending on trip preparation. Overnight resident users of the park presumably load up on supplies required for an overnight stay, such as groceries and beverages.

Table 2.2 Resident and Nonresident Park Day Visitor Average Expenditures per Group per Day in Montana

	Resident sample size	Resident daily expenditures	Nonresident sample size	Nonresident daily expenditures
Campgrounds/RV parks		NA	48	\$1.88
Hotels/motels		NA	48	\$50.29
Gasoline	298	\$18.33	76	\$34.37
Restaurant & bars	298	\$12.03	76	\$26.84
Groceries	298	\$11.24	76	\$9.40
Other retail	298	\$5.60	76	\$19.46
Guide and outfitter services	298	\$0.00	76	\$0.82
Transportation	298	\$0.00	76	\$3.68
Entrance fees	298	\$2.08	76	\$5.11
Licenses	298	\$1.69	76	\$5.09
Trip prep	298	\$4.18	76	\$0.00
Museums	298	\$0.00	76	\$1.39
Auto repair	298	\$0.00	76	\$0.00
Total		\$55.15		\$158.32

The average daily expenditures for nonresident overnight users and day users are considerably greater than that of residents, but the differences between day and overnight users are less pronounced. One exception however is lodging. While nonresident day users spent over \$50 per day on average for hotel accommodations, overnight users spent only \$25 in Montana for the same. But nonresident overnight users spent far more on camping in Montana than their nonresident day user counterparts, \$9.24 versus \$1.88. Overnight nonresidents also spent more on outfitter and guide services, \$2.33 versus \$.82, and transportation fees while in Montana.

Table 2.3 Resident and Nonresident Park Overnight Visitor Average Expenditures per Group per Day in Montana

	Resident sample size	Resident daily expenditures	Nonresident sample size	Nonresident daily expenditures
Campgrounds/RV parks	275	\$9.99	451	\$9.24
Hotels/motels	275	\$4.47	451	\$25.49
Gasoline	275	\$25.16	451	\$31.46
Restaurant & bars	275	\$8.29	451	\$23.39
Groceries	275	\$18.67	451	\$15.37
Other retail	275	\$7.91	451	\$19.25
Guide and outfitter services	275	\$5.69	451	\$2.33
Transportation	275	\$2.94	451	\$7.44
Entrance fees	275	\$2.93	451	\$4.52
Licenses	275	\$1.67	451	\$2.22
Trip prep	275	\$30.84	451	\$1.23
Museums	275	\$0.35	451	\$1.07
Auto repair	275	\$0.00	451	\$2.65
Total		\$118.91		\$145.66

Survey respondents were also asked to report expenditures made locally, that is, in and around the park. Table 2.4 summarizes this data for both resident and nonresident visitors. Average daily expenditures in the park vicinity for both resident and nonresident visitors are substantially below the average daily expenditures Montana-wide. For residents in particular, average daily spending was only 61 percent the average daily spending for resident Montana-wide spending. Nonresident daily expenditures were not only higher than resident spending, but closer to nonresident Montana-wide spending. Nonresident spending in the park and vicinity was 80 percent of the Montana-wide average daily spending for nonresident visitors. In almost all expenditure categories, park spending is below Montana-wide average daily spending for both resident and nonresident visitors. One notable exception for nonresidents is expenditures for campgrounds, where park spending was \$18.16 per day compared to \$8.53 Montana-wide. It would follow then that expenditures for lodging should be less than daily lodging expenditures state-wide, \$15.98 versus \$27.88.

Table 2.4 Resident vs. Nonresident Park Visitor Average Expenditures per Group per Day in Park Vicinity

	Resident sample size	Resident daily expenditures	Nonresident sample size	Nonresident daily expenditures
Campgrounds/RV parks	275	\$4.14	499	\$18.16
Hotels/motels	275	\$3.49	499	\$15.98
Gasoline	573	\$14.87	527	\$19.78
Restaurant & bars	573	\$8.32	527	\$19.08
Groceries	573	\$10.97	527	\$12.89
Other retail	573	\$4.93	527	\$15.43
Guide and outfitter services	573	\$3.11	527	\$0.98
Transportation	573	\$1.25	527	\$5.60
Entrance fees	573	\$2.32	527	\$5.54
Licenses	573	\$1.26	527	\$2.54
Trip prep	573	\$3.13	527	\$0.71
Museums	573	\$0.49	527	\$1.25
Auto repair	573	\$0.00	527	\$1.00
Total		\$58.79		\$118.96

Table 2.5 breaks down the data from Table 2.4 into resident and nonresident daily expenditures for park visitors spending only the day in the park. Here again nonresidents out-spend residents in all categories, most notably for gasoline, restaurants, retail purchases and entrance fees. State residents no longer pay entrance fees for state parks, explaining the almost eight fold increase in daily expenditures for entrance fees among nonresident visitors.

Table 2.5 Resident vs. Nonresident Park Day Visitor Average Expenditures per Group per Day in Park Vicinity

	Resident sample size	Resident daily expenditures	Nonresident sample size	Nonresident daily expenditures
Campgrounds/RV		NA	48	NA
parks				
Hotels/motels		NA	48	NA
Gasoline	298	\$14.65	76	\$25.47
Restaurant & bars	298	\$10.24	76	\$20.31
Groceries	298	\$9.54	76	\$11.21
Other retail	298	\$5.09	76	\$13.86
Guide and outfitter services	298	\$0.00	76	\$0.00
Transportation	298	\$0.00	76	\$0.00
Entrance fees	298	\$1.81	76	\$8.17
Licenses	298	\$1.49	76	\$5.43
Trip prep	298	\$3.02	76	\$0.00
Museums	298	\$0.00	76	\$2.28
Auto repair	298	\$0.00	76	\$0.00
Total		\$45.83		\$86.73

For day users of state parks, residents spend on average about half that of nonresident visitors to state parks. Likewise for overnight visitors residents spend on average only half the daily expenditure for nonresident overnight visitors (Table 2.6), and are outspent by their nonresident counterparts in nearly every expenditure category.

Table 2.6 Resident vs. Nonresident Park Overnight Visitor Average Expenditures per Group per Day in Park Vicinity

	Resident sample size	Resident daily expenditures	Nonresident sample size	Nonresident daily expenditures
Campgrounds/RV parks	275	\$4.14	451	\$18.16
Hotels/motels	275	\$3.49	451	\$15.98
Gasoline	275	\$15.10	451	\$18.82
Restaurant & bars	275	\$6.25	451	\$18.88
Groceries	275	\$12.51	451	\$13.18
Other retail	275	\$4.76	451	\$15.70
Guide and outfitter services	275	\$5.65	451	\$1.15
Transportation	275	\$2.60	451	\$6.54
Entrance fees	275	\$2.89	451	\$5.10
Licenses	275	\$1.01	451	\$2.05
Trip prep	275	\$3.26	451	\$0.00
Museums	275	\$0.00	451	\$1.08
Auto repair	275	\$0.00	451	\$1.17
Total		\$61.66		\$117.81

Table 2.7 presents the average daily expenditures for resident and nonresident visitors by Montana State Parks region. Montana State Park Regions 4 and 6 have been combined due to low visitation at Brush Lake State Park in Sheridan County, and to increase the sample size for statistical comparisons between Montana State Park regions. First and perhaps foremost, the average number of days spent in Montana is considerably longer for nonresident visitors in almost all regions, and slightly longer for Montana State Parks Region 7. But for resident visitors to state parks, the average number of days on the trip in Montana State Parks Region 7 is considerably longer than any other region. Also for Region 7, resident daily expenditures exceed that of nonresident daily expenditures by \$17 per day.

Table 2.7 Resident vs. Nonresident Park Visitor Average Expenditures per Group per Day by Park Region

	Resident sample size	Resident daily expenditures	Number of Days on Trip	Nonresident sample size	Nonresident daily expenditures	Number of Days on Trip in Montana
Region 1	106	\$62.61	3.87	117	\$128.59	8.22
Region 2	104	\$73.12	2.6	85	\$126.49	10.12
Region 3	78	\$106.38	4.22	78	\$174.74	7.56
Region 4 & 6	124	\$105.42	2.27	90	\$156.82	9.98
Region 5	82	\$91.78	1.82	63	\$179.92	6.97
Region 7	79	\$137.78	5.04	94	\$120.92	5.54
All regions	573	\$102.17		527	\$147.45	

Total Spending

The relative attractiveness of Montana's state parks is evident in the number of resident and nonresident visitors who enjoy them. Table 2.8 below contrasts state park visitation for 2002 and 2010.

Table 2.8 State Park Visitation, 2002 and 2010²

	Resident Pa	rk Visitors	Nonresident I	Park Visitors	Total Par	k Visitors
Region	2002	2010	2002	2010	2002	2010
Region 1	150,631	302,561	67,332	105,296	217,963	407,857
Region 2	87,900	150,967	42,191	55,351	130,091	206,318
Region 3	184,814	230,584	131,071	50,799	315,885	281,383
Region 4/6	128,720	380,827	51,918	23,597	180,638	404,424
Region 5	221,662	307,007	33,291	52,862	254,953	359,869
Region 7	89,253	169,095	64,987	41,170	154,240	210,265
Total	862,980	1,541,041	390,790	329,075	1,253,770	1,870,116

_

² Visitation figures in the economic report are based on October projections for the 2010 calendar year. Final 2010 statewide visitation estimates for the park system, therefore, will differ from data shown here. In addition, final statewide park figures are adjusted to account for parks lacking traffic counter equipment or staff, multiple entrances and walk-in use.

Montana-wide, resident visitation increased considerably (79 percent) from 2002, while nonresident visitation is down 16 percent. Total resident and nonresident park visitation is up by almost 50 percent. While all regions benefited from increased park visitation by residents, not all regions experienced declines in visitation by nonresidents. Montana State Parks Regions 1, 2, and 5 all experienced significant increases in nonresident visits. Due to the significant increase in resident visitation, all regions except Region 3 had overall increases in park visitation from 2002 to 2010.

While resident spending associated with state park visitation is important for local areas and the state as a whole, it is nonresident spending that provides the creation of new jobs, income and sales by businesses. Although resident spending supports jobs, nonresident spending creates new jobs. Nonresident spending supports new jobs above and beyond what the Montana economy could support on resident spending only.

To the extent that resident spending can provide additional stimulus to areas outside the home community, it is beyond the scope and data limitations of this study. Further, one would necessarily have to model the loss of spending power in the home community as residents spend their dollars elsewhere in Montana. In terms of the statewide economy, one region's loss would be another region's gain.

Nonresident expenditures are estimated by Montana State Parks region according to nonresident visits, average group size, and length of stay in Montana. Expenditures in and around the park were modeled, along with other expenditures made by nonresidents as they traveled around Montana. Sample data also allowed for specific expenditure modeling by spending category, capturing the unique differences region to region.

Table 2.9 Total Spending Profile, Resident and Nonresident Total Expenditures in Montana

	Resident	Resident	Nonresident sample	Nonresident
	sample size	expenditures	size	expenditures
Campgrounds/RV parks	275	\$12,712,718	499	\$10,776,125
Hotels/motels	275	\$6,430,088	499	\$19,481,174
Gasoline	573	\$33,033,899	527	\$25,628,558
Restaurant & bars	573	\$13,635,905	527	\$19,751,338
Groceries	573	\$27,188,644	527	\$13,696,171
Other retail	573	\$11,402,296	527	\$15,984,210
Guide and outfitter services	573	\$5,050,100	527	\$1,465,942
Transportation	573	\$3,326,604	527	\$5,307,149
Entrance fees	573	\$4,309,017	527	\$2,815,341
Licenses	573	\$2,096,630	527	\$1,387,398
Trip prep	573	\$46,913,642	527	\$2,229,270
Museums	573	\$797,955	527	\$975,768
Auto repair			527	\$2,826,628
Total		\$166,897,499		\$122,325,072

Table 2.9 above summarizes total resident and nonresident expenditures by expenditure category. Both residents and nonresidents spent \$289,223,000 while visiting Montana state parks. In 2002, resident and nonresident park visitors spent \$214,833,000 (inflation-adjusted to 2010 dollars) while visiting Montana state parks. In real inflation-adjusted terms resident and nonresident spending increased by 35 percent. This increase is attributable to an increase in overall park visitation primarily due to residents and higher daily expenditures for both resident and non-resident visitors.

Chapter 3: Economic Impact of Nonresident Visitation

Nonresident Economic Impacts

Table 3.1 below summarizes the impact resulting from nonresident visitor spending in and around the state parks (Park Impact), as well as the impact resulting from nonresident visitor spending in areas outside the park but in Montana (Montana Impact). Day use and overnight use nonresident visitors spent almost \$49 million in and around the state parks where the surveys were conducted. This spending resulted in direct sales of almost \$30 million, creating jobs for over 440 people. The direct labor income accompanying the employment totals \$10.6 million, for an average wage of \$23,691, well below the statewide average wage for 2009 (\$33,766). These impacts are the direct result of nonresident visitor spending in and around Montana state parks.

Table 3.1 Total Statewide Economic Impacts Attributable to Nonresident Park Visitor Spending (000's dollars)

	Park Impact	Montana Impact	Total Montana Impact
Nonresident Spending	\$48,605	\$73,720	\$122,325
Direct Sales	\$29,752	\$47,443	\$77,195
Total Sales	\$48,930	\$77,745	\$126,675
Direct Labor Income	\$10,637	\$15,800	\$26,437
Total Labor Income	\$16,462	\$25,041	\$41,503
Direct Employment	449	702	1,151
Total Employment	621	971	1,592

Nonresident visitor spending stimulates additional economic activity resulting from inter-industry sales and payrolls spent within the Montana State Parks region. The increase in industry sales (\$29.8 million), employment (449) and labor income (\$10.6 million) creates still another \$19.2 million in additional sales, an additional 172 jobs, and \$5.8 million in labor income. As table 3.1 shows, the total park impact of nonresident spending (\$48.6 million) creates \$48.9 million in new industry sales, 621 jobs, and \$16.5 million in labor income. The additional jobs created pay a wage (\$33,866) on parity with the statewide average.

Nonresidents also spend outside the park vicinity while traveling in Montana. In fact, a majority of nonresident spending occurs in areas outside the state park vicinity. This "spending along the way" amounts to nearly \$74 million, well above the amount spent locally (\$49 million). Montana state parks create an additional \$73.7 million in spending in Montana. Sales by Montana businesses increase by over \$47 million in response to this spending, creating over 700 jobs statewide with an average wage of \$22,500. But as this additional payroll gets spent and Montana business increase sales to accommodate the new demand for Montana products and services, nearly 270 jobs are created with an average wage of \$34,355.

All in all, \$122 million is spent by nonresident visitors in state parks and Montana. Tourism businesses directly benefit with over \$77 million in sales, requiring over 1,100 workers with a payroll of \$26.4 million. But as other business gear up to accommodate this additional spending, and as employees spend their paychecks, the total economic impact for parks and the state of Montana is \$126 million in increased sales, \$42 million in labor income, and almost 1,600 jobs.

In a similar study conducted in 2002, nonresident park users contributed to an estimated \$97,344,000 in increased sales, nearly \$28 million in labor income, and nearly 1,200 jobs. Table 3.2 below compares the estimated impacts using 2002 inflation adjusted dollars to the impacts estimated for 2010. Sales are 30 percent higher, labor income nearly 50 percent higher, and employment 36 percent higher than the 2002 estimates. Despite a significant decline in nonresident state park visits from 2002 (391,000 versus 329,000 visits in 2010) average expenditures were considerably higher in all categories of spending. After adjusting for inflation, expenditures per day were over 50 percent higher for both park and statewide spending in 2010. In addition, group size (2.1 versus 3.4 persons per vehicle in 2010) was higher while average length of stay (4.8 versus 3.0 in 2010) was lower.

Table 3.2 Nonresident Economic Impacts: 2002 versus 2010 (all in 2010 dollars)

	2002	2010	Percent Increase
Sales	\$97,344,000	\$126,675,000	30 %
Labor Income	\$27,951,000	\$41,503,000	48%
Employment	1,170	1,592	36%

Given the enhanced modeling feature of the IMPLAN model used in this report, the park impacts and their associated "spillover" effects on the Montana economy can now be captured. Tables 3.3 and 3.4 depict the estimated impacts resulting from over \$122 million in nonresident spending by visitors to Montana State Parks. Table 3.3 shows the park-wide impact of \$49 million in nonresident visitor spending in Montana state parks in terms of employment, labor income and sales. By a considerable margin, Montana State Parks Region 1 captured the bulk of total nonresident spending, with nearly \$21 million, or 43 percent of total nonresident spending for park vicinity purchases. The dominance of Region 1 in terms of park vicinity spending is driven primarily by the magnitude of total nonresident visitor counts by Montana State Parks region. Region 1 captures 32 percent of nonresident state park visitors, nearly twice that of Regions 2, 3 and 5. As a result, Region 1 has 41 percent of the total local employment, labor income, and sales impacts.

Table 3.3 Park Area Economic Impacts of Nonresident Park Visitor Spending, by Montana State Parks Administrative Region (000's dollars)

Montana State	Local						
Parks Region	Spending	Emplo	yment	Labort	ncome	Sa	les
Region	Spending		-				
		Direct	Total	Direct	Total	Direct	Total
1	\$20,597	186	257	\$4,444	\$6,764	\$12,265	\$20,078
2	\$5,853	57	78	\$1,326	\$2,028	\$3,529	\$5,820
3	\$5,054	43	63	\$1,130	\$1,822	\$3,168	\$5,456
4/6	\$3,767	43	60	\$950	\$1,508	\$2,785	\$4,646
5	\$10,088	88	125	\$2,063	\$3,411	\$6,305	\$10,514
7	\$3,247	32	38	\$723	\$929	\$1,699	\$2,418
TOTAL	\$48,605	449	621	\$10,637	\$16,462	\$29,752	\$48,930

Region 1 also had the longest average length of stay for park visitors, with nonresidents spending almost 6 days in the park or local area compared to only 4.3 days for all regions combined.

Region 1 nonresident visitors also spent the most outside the parks, contributing \$17 million in spending statewide, see Table 3.4. As was the case in the 2002 study, nonresident spending in areas outside the parks and local areas comprised the majority of nonresident visitor spending, accounting for 60 percent

of total nonresident spending. Particularly revealing in Table 3.4 is despite the highest proportion of nonresident spending, Region 1 employment, labor income and sales lag behind several other regions with smaller nonresident spending, specifically Regions 2 and 3. This is the result of several contributing factors. For Montana State Parks Region 2, despite the fewest days spent in the park or surrounding area, nonresident visitors in Region 2 spent the greatest number of days in Montana, 10.1 compared to an all-region average of 8.1 days. But more importantly, Montana State Parks Regions 2 and 3 have considerably more impacts on employment, labor income and sales due to the inter-industry relationships within each region and the expenditure categories where nonresidents spend. For example, in Montana State Parks Region 3, an extra \$1 million was spent on hotels, contributing to an additional 20+ jobs statewide over and above the hotel jobs created in Montana State Parks Region 1. Likewise for restaurants, nearly \$1 million more was spent in Montana State Parks Region 3, creating nearly 20 more jobs within that region as compared to Region 1.

Table 3.4 Montana Economic Impacts Attributable to Nonresident Park Visitor Spending, by Montana State Parks Region (000's dollars)

Montana							
State							
Parks	Montana						
Region	Spending	Emplo	yment	Labor I	ncome	Sa	les
		Direct	Total	Direct	Total	Direct	Total
1	\$17,337	140	197	\$3,264	\$5,233	\$9,870	\$16,283
2	\$16,627	153	210	\$3,463	\$5,443	\$10,259	\$16,771
3	\$16,939	170	230	\$3,667	\$5,727	\$11,113	\$17,833
4/6	\$7,217	84	117	\$1,854	\$2,980	\$5,618	\$9,291
5	\$8,114	84	115	\$1,874	\$2,915	\$5,481	\$8,978
7	\$7,486	71	102	\$1,677	\$2,743	\$5,103	\$8,589
TOTAL	\$73,720	702	971	\$15,800	\$25,041	\$47,443	\$77,745

Conclusion

Nonresident visitors to Montana state parks spent over \$122 million in 2010. As a direct result of this spending, tourism and tourism related industries created over 1,100 jobs, \$26 million in labor income, and \$77 million in industry sales. To accommodate this increase in sales by tourism and tourism related industries, many other sectors of the Montana economy benefited as well, as tourism industries increased their demands for resources. In addition, the \$26 million payroll added jobs, labor income and sales to the economy as households spent their paychecks. The industry-wide response to tourism related impacts created still another 441 jobs, an additional \$15 million in labor income, and \$49 million in industry sales.

Perhaps most important however is that businesses and employees benefit all over the state from nonresident visitor spending. Although it is impossible to separate respondents expenditures reported as "outside the local area" that may in fact occur at other state parks, most of the spending impacts are generated in areas outside the parks visited. Nearly \$74 million (61 percent) is spent outside the parks. Hence, well over half of all employment, labor income and sales are generated as the result of nonresident spending around the state.

Regional differences in impacts exist as well. Montana State Parks Region 1 benefits the most from nonresident visitor spending, the result of capturing almost a third of all nonresidents visiting Montana state parks in 2010. But these nonresidents do not exclusively benefit Montana State Parks Region 1.

Nonresident visitors to Montana State Parks Region 1 also spent elsewhere in the state, creating 12 percent of the total jobs created statewide, and 13 percent of the statewide labor income and sales attributable to nonresident visitor spending. Nonresident visitors to Montana State Parks Region 3 contribute the most to the Montana economy in terms of spending that occurs outside the park they are visiting. Almost 15 percent of the state's employment created by tourism and tourism related spending comes from nonresidents as they spend outside Montana State Parks Region 3.

Figure 3.1 below shows the total spending by nonresidents by Montana State Parks Region, which includes spending within the region (at the park or surrounding area) and spending in Montana but outside the parks. Montana State Park Region 1, with nearly a quarter of the state's parks, captures \$37.9 million, or 31 percent of the spending by nonresidents in Montana visiting state parks. Region 2 follows with \$22.5 million, representing 18 percent of the spending in Montana by nonresidents.

Spending, Sales, and Labor Income Attributable to **Nonresident Visitors by Montana State Parks** Region (000's of dollars) 40,000 35,000 30,000 25,000 ■ Spending 20,000 ■Sales ■Labor Income 15,000 10,000 5,000 Regions Region 3 Regional6

Figure 3.1 Nonresident Spending, Sales and Labor Income

Chapter 4: Possible State Park Funding Preferences

Resident park visitors, and their out of state neighbors, expressed a broad range of clear preferences for future measures that could be considered to fund operations and maintenance of State Parks (see Table 4.1). A very large proportion of Montana residents, usually 90% of the 573 resident respondents, felt qualified to express an opinion about these items. In contrast, a sizable proportion of nonresidents, often 30% or more of the 527 nonresident respondents, felt unqualified to express an opinion.

Table 4.1 Mean Scores for Montana State Park Funding Options

	2010 Montana State Park Funding Option Support									
	7 = Strongly Support, 1 = Strongly Oppose		/lean Score							
		MT	Non-							
Rank	Funding Option	resident	resident	Total						
1	Increase use of volunteers?	6.5 _a	6.7 _b	6.6						
2	Designating a portion of existing state taxes to parks?	5.8 _a	6.3 _b	5.9						
3	Increasing park revenues by expanded sale of items such as firewood, ice, T- shirts and artwork?	5.8 _a	6.2 _b	5.8						
4	Enforcing user fee compliance more strictly?	5.7 _a	6.0 _a	5.7						
5	Creation of a "hardship pass" to help financially challenged Montana residents camp in a state park at a discounted rate?	5.1 _a	5.1 _a	5.1						
6	Asking cities to take ownership of parks inside city limits?	4.4 _a	4.5 _a	4.4						
7	Changing the optional Montana vehicle registration fee to a required fee?	4.3 _a	5.0 _a	4.4						
8	Using corporations to increase advertising or partnerships?	4.2a	4.7b	4.3						
9	Forming a statewide mill levy for state parks?	4.1 _a	4.9 _b	4.2						
10	Increasing user fees such as camping, nonresident entrance, and extra vehicle fees?	4.0 _a	4.3 _a	4.1						
11	Charging additional fees for special events, interpretive talks, and other secondary items?	3.9 _a	4.2 _a	4.0						
12	Cut back on hours at visitor centers?	3.6 _a	3.9 _a	3.7						
13	Cut back on special events?	3.1 _a	3.4 _a	3.2						
14	Cut back on interpretive and educational programs?	2.8 _a	2.8 _a	2.8						
15	During peak use periods, eliminating fee waivers and discounts for seniors?	2.7 _a	3.1 _a	2.8						
16	Selling, closing or trading out some state parks that do not have regional or statewide significance?	2.6 _a	2.2 _b	2.5						
17	Cut back on site improvements such as building a restroom or boat ramp?	2.4 _a	2.9 _b	2.5						
18	Cut back on historic resource management such as building stabilization and archaeological work?	2.3 _a	2.3 _a	2.3						
19	Privatizing state parks?	2.1 _a	2.4 _a	2.1						
20	Lay off employees?	2.1 _a	1.9 _a	2.1						
21	Cutting back on public safety or enforcement of regulations (like quiet hours or littering)?	1.9 _a	1.8 _a	1.8						
22	Cut back on park maintenance and services?	1.7 _a	1.7 _a	1.7						

Note: Values in the same row and subtable not sharing the same subscript are significantly different at p< 0.05 in the two-sided test of equality for column means.

Resident park visitors expressed a broad range of clear preferences for future measures that could be used to fund operations and maintenance of state parks. The largest majority of resident park visitors supported these four items:

- 1. Increase use of volunteers (90.7% support),
- 2. Designating a portion of existing state taxes to parks (80.2% support),
- 3. Increasing park revenues by expanded sale of items such as firewood, ice, T- shirts and artwork (80.2% support), and
- 4. Enforcing user fee compliance more strictly (71.8% support).

The largest majority of resident park visitors opposed these four items:

- 1. Cut back on park maintenance and services (86.2% opposition),
- 2. Cutting back on public safety or enforcement of regulations (like quiet hours or littering) (84.5% opposition),
- 3. Privatizing state parks (79.3% opposition), and
- 4. Laying off employees (79.0% opposition).

Nonresident visitors overall expressed a striking level of agreement with resident visitors. While the answers of residents and nonresidents to six of the possible funding options displayed <u>statistically significant</u> differences, there was little <u>practical</u> difference between residents' and nonresidents' overall responses. Statistically significant differences here mean the difference is significant at a 95% confidence level using the appropriate statistical test. Practical differences depend on question language, but in this case a difference between a mean question score of 6, or "Somewhat Support," and 5, or "Slightly Support," has practical meaning that the lay person can readily understand. One item in which a practical difference between residents and nonresidents can be seen is, "Forming a statewide mill levy for state parks." The mean nonresident score is 4.9 or "Slightly Support," but the resident score is 4.1 or "Neutral."

Not only did park visitors express clear overall preferences, demonstrated in Table 4.1 by several mean question scores that are near the ends of the one to seven scales, the intensity of these opinions adds clarity to the findings. The next section examines the intensity of park visitors' possible funding option preferences.

Intensity of Support or Opposition among Montana Residents

Analysis of the following items revealed relatively intense support among Montana resident visitors:

- Increasing the use of volunteers as a possible funding option (71.1% strongly support) (see Table 4.2 on the next page),
- Creation of a "hardship pass" to help financially challenged Montana residents camp in a state park at a discounted rate (61.1% combined strong or somewhat support).

Examination of the items listed below exposed relatively intense opposition:

- Cut back on park maintenance and services (68.2% strongly oppose),
- Cut back on public safety or enforcement (65.9% strongly oppose),
- Privatize Montana State Parks (62.6% strongly oppose).
- Lay off employees (55.8% strongly oppose), and
- Eliminate fee waivers and discounts for seniors during periods of peak use (52.8% strongly oppose).

Likewise, four items received a level of strong or somewhat oppose that also exceeded a majority of Montana resident park visitors:

- Cut back on historic resource management such as building stabilization and archaeological work (64.7% strong or somewhat oppose),
- Cut back on site improvements such as building a restroom or boat ramp (64.9% strong or somewhat oppose),
- Selling, closing or trading out some state parks that do not have regional or statewide significance (60.1% strong or somewhat oppose), and
- Cut back on interpretive and educational programs (54.3% strong or somewhat oppose).

Table 4.2 Percent of Resident Support or Opposition Responses to Possible Funding Options

	2010 Mo	ntana State	e Park Fu	nding Op	tions: Re	sidents		
Funding Option	Support strongly	Support somewhat	Support slightly	Neutral	Oppose slightly	Oppose somewhat	Oppose strongly	DK
Increase use of volunteers?	71.1%	17.0%	2.6%	1.0%	.7%	1.7%	1.5%	4.5%
Designating a portion of existing state taxes to parks?	40.8%	34.4%	5.0%	2.6%	2.5%	4.2%	4.9%	5.6%
Increasing park revenues by expanded sale of items such as firewood, ice, T- shirts and artwork?	42.7%	30.3%	7.2%	2.6%	1.2%	3.2%	7.5%	5.3%
Enforcing user fee compliance more strictly?	47.3%	19.9%	4.6%	3.0%	1.6%	7.6%	5.9%	10.0%
Creation of a "hardship pass" to help financially challenged Montana residents camp in a state park at a discounted rate?	36.5%	24.6%	6.2%	1.5%	2.3%	9.5%	13.7%	5.8%
Asking cities to take ownership of parks inside city limits?	16.9%	30.3%	8.4%	4.2%	2.6%	6.8%	21.4%	9.4%
Changing the optional Montana vehicle registration fee to a required fee?	27.2%	21.2%	4.7%	2.7%	3.7%	11.0%	23.3%	6.2%
Using corporations to increase advertising or partnerships?	18.1%	23.7%	7.9%	3.1%	3.8%	8.7%	22.5%	12.1%

	2010 Mo	ntana State	e Park Fu	nding Op	otions: Re	sidents		
	Support	Support	Support	. 0 - 1	Oppose	Oppose	Oppose	
Funding Option	strongly	somewhat	slightly	Neutral	slightly	somewhat	strongly	DK
Forming a statewide mill levy for state parks?	18.6%	21.7%	5.6%	3.0%	5.6%	10.3%	23.1%	12.1%
Increasing user fees such as camping, nonresident entrance, and extra vehicle fees?	15.0%	24.5%	10.0%	3.2%	3.7%	12.6%	23.9%	7.2%
Charging additional fees for special events, interpretive talks, and other secondary items?	13.1%	25.1%	7.9%	3.3%	7.0%	13.7%	22.7%	7.2%
Cut back on hours at visitor centers?	4.5%	24.4%	11.2%	6.5%	5.4%	14.2%	24.1%	9.7%
Cut back on special events?	5.2%	15.9%	8.0%	6.0%	6.5%	18.4%	30.2%	9.9%
Cut back on interpretive and educational programs?	4.8%	13.3%	6.6%	4.5%	7.2%	14.3%	40.0%	9.4%
During peak use periods, eliminating fee waivers and discounts for seniors?	11.9%	10.6%	3.7%	1.7%	3.5%	11.1%	52.8%	4.6%
Selling, closing or trading out some state parks that do not have regional or statewide significance?	4.5%	11.7%	4.9%	3.3%	4.1%	17.1%	43.0%	11.4%
Cut back on site improvements such as building a restroom or boat ramp?	5.0%	8.7%	5.4%	3.5%	6.5%	17.5%	47.5%	6.0%
Cut back on historic resource management such as building stabilization and archaeological work?	3.4%	8.2%	5.2%	3.5%	7.6%	15.8%	49.0%	7.3%
Privatizing state parks?	4.1%	8.1%	2.4%	2.1%	3.9%	9.5%	62.6%	7.2%
Lay off employees?	2.2%	7.1%	5.7%	2.4%	3.7%	16.2%	55.8%	7.0%
Cutting back on public safety or enforcement of regulations (like quiet hours or littering)?	4.1%	4.3%	3.5%	1.4%	2.3%	12.9%	65.9%	5.7%
Cut back on park maintenance and services?	.9%	3.6%	3.2%	1.2%	4.9%	12.8%	68.2%	5.2%

Intensity of Support or Opposition among Nonresidents

Perhaps the most striking difference between resident park visitors and their nonresident colleagues is that roughly three in ten nonresidents felt unqualified to comment on the possible funding options (see Table 4.3 on the next page). This is to be expected since some of these items lack relevance for nonresidents.

Second, resident and nonresident state park visitors ranked the possible funding options in a very similar manner, but nonresidents expressed less intensely held opinions. It may be the case that nonresident park visitors have less at stake when asked about Montana State Park funding options. This is illustrated by examining the intensity of support for increasing the use of volunteers in state parks and the intensity of opposition to cutting back on park maintenance and services. While 71.1% of Montana resident park visitors strongly supported increasing the use of volunteers, only 59.3% of nonresident visitors cited the same intensity of support. In a similar manner, while 68.1% of resident park visitors strongly opposed cutting back on park maintenance and services, only 49.8% of nonresident visitors expressed the same intensity of opposition.

Only three possible funding options demonstrated both a difference in resident and nonresident ranking and a statistically significant difference in mean support score:

- 1. Residents ranked forming a statewide mill level for state parks lower (rank 9th) than did nonresidents (rank 7th). However, while 23.1% of residents strongly opposed this option, only 10.1% of nonresidents expressed the same intensity of opposition.
- Residents ranked selling, closing or trading out some state parks that do not have regional or statewide significance higher (rank 16th) than did nonresidents (rank 19th). However, while 16.2% of residents expressed strong or somewhat support for this option, only 9.8% of nonresidents expressed the same level of support.
- 3. Residents ranked cutting back on site improvements such as building a restroom or boat ramp lower (rank 17th) than did nonresidents (rank 15th). However, while 45.7% of residents strongly opposed this option, only 31.0% of nonresidents strongly opposed it.

Following Table 4.3 on the next page, this report examines nonresident satisfaction with various aspects of Montana's State Parks.

Table 4.3 Percent of Nonresident_Support or Opposition Responses to Possible Funding Options

2		ana State F					ing Option	<u> </u>
Funding Option	Support strongly	Support somewhat	Support slightly	Neutral	Oppose slightly	Oppose somewhat	Oppose strongly	DK
Increase use of volunteers?	59.3%	9.0%	2.6%	.3%	.2%	.7%	.0%	27.9%
Designating a portion of existing state taxes to parks?	41.4%	17.2%	3.4%	2.1%	.7%	1.4%	1.7%	32.1%
Increasing park revenues by expanded sale of items such as firewood, ice, T- shirts and artwork?	36.2%	26.2%	3.5%	1.2%	1.3%	1.9%	1.1%	28.6%
Enforcing user fee compliance more strictly?	39.3%	16.2%	2.9%	3.5%	.8%	3.6%	2.3%	31.4%
Creation of a "hardship pass" to help financially challenged Montana residents camp in a state park at a discounted rate?	24.1%	19.4%	4.6%	1.8%	2.5%	7.2%	8.4%	32.1%
Asking cities to take ownership of parks inside city limits?	14.5%	21.1%	7.3%	4.1%	1.6%	8.5%	13.6%	29.3%
Changing the optional Montana vehicle registration fee to a required fee?	8.7%	4.5%	1.8%	2.3%	1.1%	1.7%	3.2%	76.6%
Using corporations to increase advertising or partnerships?	18.1%	22.7%	6.3%	1.2%	1.8%	8.0%	12.9%	29.1%
Forming a statewide mill levy for state parks?	15.3%	21.3%	4.8%	2.7%	1.8%	4.5%	10.1%	39.6%
Increasing user fees such as camping, nonresident entrance, and extra vehicle fees?	14.6%	20.6%	7.4%	1.7%	1.9%	8.1%	18.1%	27.5%
Charging additional fees for special events, interpretive talks, and other secondary items?	9.6%	23.8%	8.9%	2.7%	2.3%	8.4%	16.7%	27.6%
Cut back on hours at visitor centers?	2.4%	24.5%	9.1%	2.7%	3.0%	10.3%	16.0%	32.1%
Cut back on special events?	2.5%	15.8%	6.3%	5.6%	4.0%	13.2%	17.9%	34.8%
Cut back on interpretive and educational programs?	2.0%	12.0%	6.2%	2.5%	3.9%	12.1%	31.1%	30.3%
During peak use periods, eliminating fee waivers and discounts for seniors?	9.2%	11.6%	5.9%	2.0%	2.3%	7.6%	34.6%	26.7%

2	010 Mont	tana State F	Park Fund	ling Opti	ons: Non	residents		
Funding Option	Support strongly	Support somewhat	Support slightly	Neutral	Oppose slightly	Oppose somewhat	Oppose strongly	DK
Selling, closing or trading out some state parks that do not have regional or statewide significance?	2.7%	7.1%	3.4%	.9%	3.4%	10.7%	44.7%	27.1%
Cut back on site improvements such as building a restroom or boat ramp?	2.1%	14.5%	4.9%	2.1%	3.7%	12.2%	31.0%	29.5%
Cut back on historic resource management such as building stabilization and archaeological work?	1.8%	8.5%	3.2%	2.9%	3.1%	11.9%	37.9%	30.7%
Privatizing state parks?	2.2%	9.8%	4.2%	3.5%	2.4%	7.6%	44.7%	25.6%
Lay off employees?	.5%	4.8%	2.5%	1.3%	4.4%	12.5%	44.2%	29.9%
Cutting back on public safety or enforcement of regulations (like quiet hours or littering)?	2.8%	3.5%	1.8%	1.6%	.9%	7.1%	54.1%	28.3%
Cut back on park maintenance and services?	.9%	3.9%	1.5%	.8%	2.7%	12.5%	49.8%	27.9%

Vehicle Registration Fee

Between 67.7% and 77.7% of resident visitors supported raising the current optional vehicle registration fee from \$4.00 per year to \$5.00 - \$7.00 per year (see Table 4.4). Table 4.4 shows when a statistically significant difference in support between possible fee amounts was found. This means that if BBER conducted the survey 100 times, a difference in support levels for possible fee amounts, as shown by the subscripts in Table E.2 below, would be found in 95 of the replications.

Table 4.4

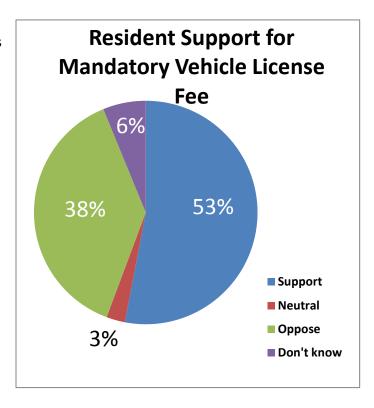
% Support for Increasing the Current Optional Vehicle Registration Fee to Selected Higher Amounts among Montana Resident Park Visitors								
		Possible fee amount						
		\$5.00	\$6.00	\$7.00				
Would you, yourself, support or oppose	Support	77.7% _a	71.7% _{a,b}	67.7% _b				
increasing the vehicle registration fee that	Oppose	17.1% _a	23.1% _{a,b}	26.5% _b				
allows for unlimited day use of state parks from current \$4 to \$X?	Don't know	5.3% _a	5.2% _a	5.8% _a				

Note: Values in the same row and subtable not sharing the same subscript are significantly different at p< 0.05 in the two-sided test of equality for column proportions.

A slim majority of resident park visitors

(53.0%) supported changing the optional Montana vehicle registration fee that allows for unlimited day use of state parks to a required fee, while 38.1% opposed making the fee a required fee (see Figure 4.1). The remaining 8.9% were neutral about the change or answered that they didn't know.

Figure 4.1



Chapter 5: Visitor Satisfaction

Overall satisfaction with Montana State parks increased between 2002 and 2010. On a scale from one to five, where one is not at all satisfied and five is very satisfied, the overall mean level of satisfaction was 4.7 for both residents and nonresidents in 2010. In 2002 the overall mean was 4.5. Satisfaction was high for all features and most showed an increase over 2002.

Table 5.1 Satisfaction with Features at Montana State Parks

	Mean				
		2010			
Feature	Montana resident	Non- resident	All visitors	All visitors	
Overall Satisfaction	4.7	4.7	4.7*	4.5*	
Staff service	4.7*	4.8*	4.7*	4.5*	
Parking	4.6	4.7	4.6*	4.5*	
Campground	4.6	4.6	4.6	4.3	
Rest rooms	4.6	4.6	4.6*	4.3*	
Signs	4.6*	4.4*	4.6*	4.3*	
Group use area	4.6	4.4	4.5	NA	
Picnic area	4.5	4.6	4.5*	4.3*	
Interpretive displays	4.5	4.5	4.5*	4.3*	
Boat ramp	4.4	4.6	4.5	4.0	
Trails	4.4	4.5	4.4	4.3	
Roads	4.4	4.5	4.4*	4.1*	
Boat dock	4.4	4.6	4.4	3.7	
Electricity	4.3	4.5	4.4	NA	
Gift shop	4.2	4.4	4.2	NA	
Showers	4.0*	4.4*	4.1	3.9	
Beach	4.1	4.2	4.1	3.7	
Cabins, yurts, tepees	3.9	4.6	4.1	NA	
* Differences significant a	nt the .05 level.				

Table 5.2 shows how Montana resident satisfaction in 2010 was dispersed. Nearly three out of four respondents (72.7%) were very satisfied with their visit; less than 5% expressed any dissatisfaction with their overall visit.

It is important that readers be aware of the proportion of respondents in both Tables 5.2 and 5.3 that answered satisfaction questions with "Don't Know." This is a perfectly legitimate response particularly if the visitor did not use the feature in question. In fact, the "Don't Know" proportions are good indicators of experience or participation rates. The higher the "Don't Know" proportion, the lower the visitor experience or participation with the feature.

Table 5.2 2010 Resident Satisfaction with Features at Montana State Parks

			Resid	ent (%)		
	Not at			, ,		
	all				Very	Don't
	satisfied	2	3	4	satisfied	know
Overall	.0%	.8%	3.4%	23.1%	72.7%	.0%
Satisfaction						
Staff service	.7%	1.0%	4.6%	12.7%	73.4%	7.6%
Parking	.6%	1.9%	7.2%	15.2%	74.7%	.4%
Campground	.4%	.8%	1.9%	10.3%	33.0%	53.7%
Rest rooms	.9%	1.2%	6.2%	20.4%	60.8%	10.6%
Signs	.1%	.7%	6.2%	25.5%	62.9%	4.6%
Group use	.1%	.2%	2.3%	6.1%	18.7%	72.5%
area						
Picnic area	.5%	1.2%	5.4%	16.9%	47.2%	28.9%
Interpretive	.4%	1.3%	5.9%	19.1%	46.2%	27.1%
displays						
Boat ramp	.5%	.9%	5.1%	8.9%	27.2%	57.4%
Trails	1.1%	1.9%	8.7%	17.4%	43.7%	27.2%
Roads	1.6%	3.7%	10.0%	24.1%	59.8%	.9%
Boat dock	.5%	1.7%	4.3%	7.2%	22.6%	63.6%
Electricity	.9%	.6%	1.0%	1.7%	8.9%	86.8%
Gift shop	.7%	.9%	4.3%	6.5%	13.2%	74.5%
Showers	2.1%	.9%	3.0%	2.0%	11.2%	80.9%
Beach	.8%	2.6%	7.6%	9.5%	18.6%	60.9%
Cabins, yurts,	.9%	.0%	.6%	1.1%	3.0%	94.4%
tepees						
* Differences sig	nificant at	the .05	evel.			

Overall, three quarters of nonresidents (75.0%) were very satisfied with their park visit. Staff service and parking received particularly high marks. Roads, rest rooms, signs and also were well received. Nonresidents did not use boat facilities, group areas, showers and other camping amenities in large numbers but those who did were very satisfied.

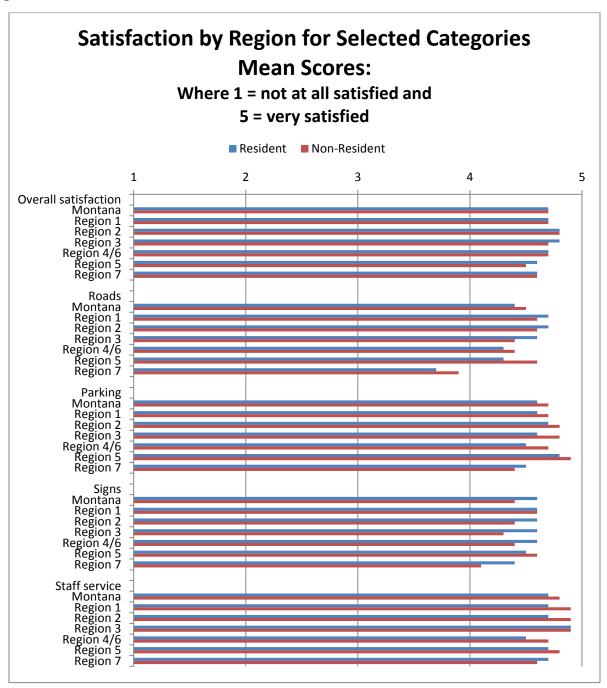
Table 5.3 2010 Nonresident Satisfaction with Features at Montana State Parks

			Nonres	sident (%)	
	Not at all satisfied	2	3	4	Very satisfied	Don't know
Overall Satisfaction	.7%	1.4%	3.4%	18.9%	75.0%	.7%
Staff service	.7%	.8%	2.5%	7.9%	84.4%	3.7%
Parking	.1%	1.2%	3.5%	16.9%	74.7%	3.5%
Campground	.1%	.5%	3.8%	10.7%	38.3%	46.5%
Rest rooms	.5%	1.8%	6.6%	16.4%	59.7%	14.9%
Signs	.7%	2.8%	8.6%	25.7%	57.8%	4.4%
Group use area	.1%	.0%	2.0%	4.6%	9.1%	84.2%
Picnic area	.2%	.7%	1.7%	13.7%	39.3%	44.3%
Interpretive displays	.5%	1.7%	7.0%	17.8%	45.8%	27.2%
Boat ramp	.1%	.5%	1.0%	4.7%	14.5%	79.2%
Trails	.5%	1.9%	6.2%	17.3%	45.5%	28.6%
Roads	.7%	2.4%	9.0%	21.8%	64.7%	1.5%
Boat dock	.1%	.3%	1.5%	4.4%	14.2%	79.5%
Electricity	.3%	.3%	2.2%	3.8%	15.2%	78.3%
Gift shop	.0%	.3%	3.4%	6.4%	13.2%	76.7%
Showers	.4%	1.2%	3.1%	5.0%	18.9%	71.4%
Beach	.5%	1.6%	4.8%	6.6%	16.0%	70.5%
Cabins, yurts, tepees	.0%	.1%	.5%	1.6%	4.5%	93.3%
* Differences significa	nt at the .0	5 level.				

Selected Observations by Region

Both resident and nonresident visitors were overall very satisfied with their visit across all regions (see Figure 5.1). In the four categories where nearly all respondents answered, (roads, parking, signs, and staff service) the only areas with any noticeable dissatisfaction at all were roads and signs in Region 7. The gravel road section of Rosebud Battlefield State Park may be a contributing factor based on respondent reports.

Figure 5.1



Chapter 6: Visitor Likes and Dislikes

Respondents were asked what they liked and disliked most about their state park visit. The responses were coded so they could be ranked. The ten top-ranked categories of responses are found in Tables 6.1 and 6.2 below. Almost all respondents gave a valid response to the like (99.5%) and dislike questions (99.8%). Readers should take note that these questions were open-ended, that is, no response option was provided. The answers reported were those that were most salient to the respondent at the time of the interview. The 2010 and 2002 rankings provided below include the combined responses of residents and nonresidents.

Both residents and nonresidents had similar likes with only a few differences (see Table 6.1). Cleanliness was ranked first one by residents and second two by nonresidents. The 2002 rank was sixth. Nonresidents were particularly enthusiastic about the friendly staff with about 16% of nonresidents mentioning staff compared to 6% of residents. Signs were high on nonresidents' minds, ranked third among things they liked most. Historical significance was ranked high by both residents and nonresidents. This may be related to inclusion of several historical parks in the 2002 and 2010 State Park Survey sample. Residents ranked close to home number fourth, while beauty was ranked fourth by nonresidents.

Table 6.1: Top Ten Visitor Likes

p ren visit	or Likes			
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Mentioned istic in 2010
2010 Rank	2002 Rank	Park Characteristic	Resident	Nonresident
1	6	Clean	9.2%	7.8%
2	2	Friendly staff*	6.0%	16.1%
3	5	Historic significance	6.0%	6.7%
4	3	Close to home*	5.5%	0.9%
5	NA	Signs (road signs, interpretive, campground rules, etc.)	5.3%	7.5%
6	8	Access to rivers, lakes, or streams	5.1%	3.2%
7	NA	Convenience	3.9%	3.7%
8	4	Campground	3.5%	3.6%
9	1	Beauty	3.3%	5.3%
10	NA	Hiking trails	3.2%	1.9%

^{*} Difference between 2010 MT resident and nonresident proportions significant at p < .05 level.

Dislikes were a little harder to identify (see Table 6.2), with nearly 40% of Montana residents and 45% of residents unable to come up with a single dislike. Weather and noise issues were mentioned as well as issues related to other visitors.

Table 6.2 Top Ten Visitor Dislikes

				Mentioned cteristic
2010 Rank	2002 Rank	Park Characteristic	Resident	Nonresident
1	3	Nothing	39.6%	45.5%
2	NA	Bad Weather	4.2%	4.6%
3	2	Train Noise	3.4%	4.8%
4	4	Bad Roads	3.2%	1.6%
5	2	Too Many People	3.1%	2.1%
6	NA	Mosquitoes	3.0%	2.1%
7	2	People Disobeying Rules	2.2%	1.1%
8	NA	Hot Weather	1.9%	1.2%
9	NA	Bathrooms	1.8%	1.1%
10	2	Traffic Noise	1.6%	0.5%

^{*} Difference between 2010 MT resident and nonresident proportions significant at .05 level.

Note: Crowds, noise, and bad neighbors were all one "dislike" category in the 2002 report.

Chapter 7: Visitor Activities

Respondents were also asked a list of activities commonly occurring in or near state parks. Not all activities are available in all parks. Photography was the most often mentioned activity with over half of residents and over three quarters of nonresidents taking pictures. Wildlife and nature study were second for both residents and nonresidents. Both residents and nonresidents picnicked and day hiked in similar proportions. Nonresidents were more likely to visit historical sites or museums while Montana residents participated in outdoor recreational activities like fishing and boating.

Table 7.1 Participation in Recreational Activities While Visiting a Montana State Park

Activity		2010		2002
	Resident	Nonresident	All Visitors	All Visitors
	Yes %	Yes %	Yes %	Yes %
Photography	53.1% _b	78.1% _a	57.5%	NA
Wildlife watching, nature study	53.0% _b	62.7% _a	54.7%	60.0%
Picnicking, day use	51.1% _a	52.0% _a	51.2%	51.0%
Day hiking	44.5% _a	47.6% _a	45.0%	40.0%
Overnight camping except backpacking	39.8% _b	56.6% _a	42.7%	49.0%
Visiting scenic or historic sites, museums, etc.	36.1% _b	62.8% _a	40.8%	55.0%
Dining for pleasure	27.4% _b	60.7% _a	33.3%	52.0%
Fishing	34.5% _b	20.7% _a	32.0%	29.0%
Visiting friends or relatives, reunions	30.2% _a	36.9% _a	31.4%	32.0%
Swimming	32.0% _a	25.2% _a	30.8%	33.0%
Shopping	19.2% _b	54.7% _a	25.5%	40.0%
Tours or interpretive programs at the park	22.4% _a	27.3% _a	23.3%	NA
Motor boating, waterskiing, jet skiing	24.9% _b	12.1% _a	22.6%	22.0%
Sailing, rafting, canoeing, floating, wind surfing	17.7% _b	11.6% _a	16.6%	13.0%
Entertainment activities, outdoor performances, fairs, festivals, ceremonies, etc.	7.5% _b	17.4% _a	9.3%	14.0%
Bicycling	7.2% _a	10.8% _a	7.8%	5.0%
Jogging, running	7.1% _a	6.2% _a	7.0%	6.0%
Driving off-highway vehicles or motorcycles	5.0% _a	6.3% _a	5.3%	4.0%
Backpacking	1.4% _a	2.3% _a	1.5%	2.0%
Horseback riding	.5% _b	2.7% _a	.9%	3.0%

Note: 2010 values in the same row and subtable not sharing the same subscript are significantly different at p< 0.05 in the two-sided test of equality for column proportions.

Selected Activity Participation by Region

Figure 7.1 illustrates the top 10 most frequent activities participated in by resident visitors in each region.

Figure 7.1

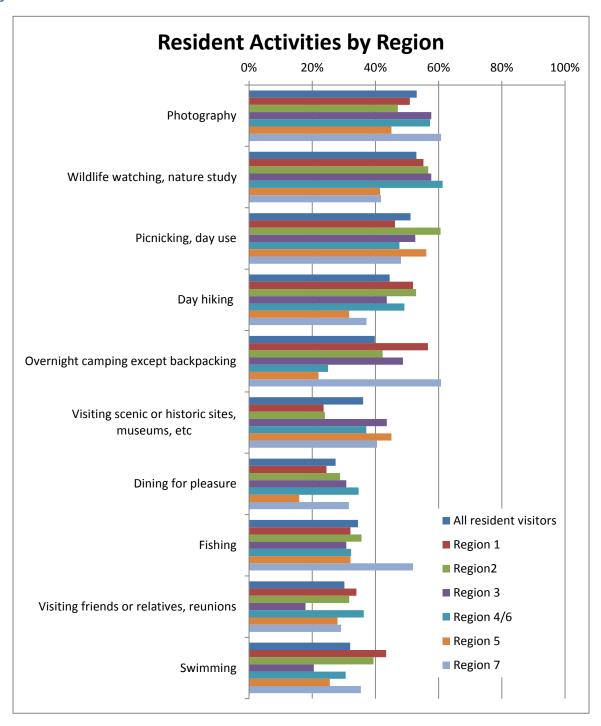
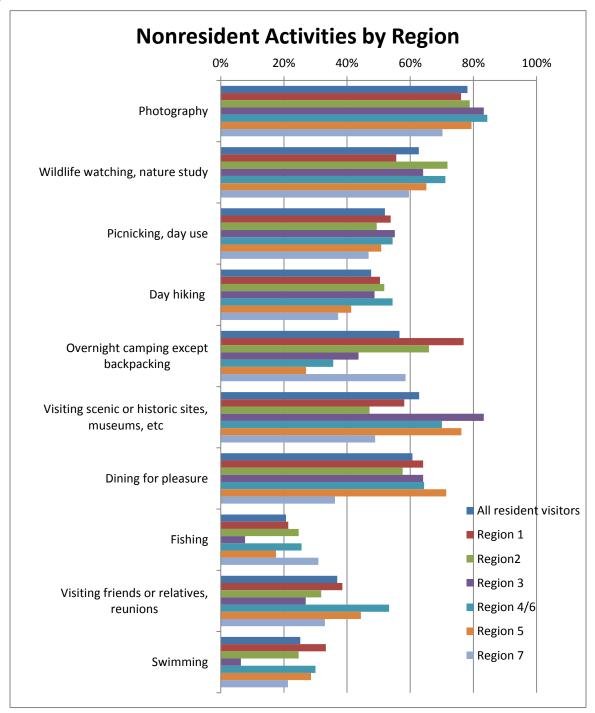


Figure 7.2 illustrates the top 10 most frequent activities participated in by nonresident visitors in each region.

Figure 7.2



Chapter 8: Survey Methods

Objective

Montana State Parks needed current data on the economic impact visits to its parks have on Montana. Montana State Parks also needed to learn about visitor satisfaction and the demographic characteristics of visitors to Montana State Parks, as well as gauge visitor preferences for state park funding options. Bureau of Business and Economic Research (BBER) at The University of Montana-Missoula developed and administered a telephone survey to provide Montana State Parks with this information. Continuity in design with a previous version of this study conducted in 2002 was required to maintain result comparability so that trends could be analyzed.

Survey Design

Questionnaire Development

The 2010 survey was the second iteration of cross-sectional analysis designed to provide both a snapshot of current public behavior and opinion, and to offer trend analysis. Continuity in design with the 2002 survey was required to maintain result comparability. Modifications of the previous questionnaire were made to:

- remove data elements that will not be analyzed,
- add questions that reflect current visitor behavior,
- meet Montana State Parks' current information needs.

Researchers at the BBER designed the questionnaire based on information needs described by Montana State Parks. BBER used an iterative process to draft the questionnaire during which Montana State Parks reviewed completed drafts.

Following the initial development process by BBER and Montana State Parks, the questionnaire was further refined through a full-scale field test. The field test was administered by BBER to a sample of 40 adult respondents. The field tests verified all survey systems, including the Computer-Assisted Telephone Interview (CATI) program, data capture, and data export functions. BBER observed field test interviews and debriefed interviewers to determine whether the questionnaire needed further modification. Montana State Parks was the final approval authority for the questionnaire.

Sampling

Sampling was conducted using an in-person intercept process to collect contact information for park visitors. The population sampled was all visitors to selected Montana State Parks. Parks were selected by Montana State Parks using resident visitorship per year, nonresident visitorship per year, the presence of full-time Montana State Parks staff, region, and park type as selection criteria. This project was designed to provide Montana State Parks at least 400 completed cases among residents and 400 completed cases among nonresidents. This number of completed cases was sufficient to yield statistically appropriate results statewide. Montana State Parks staff collected contact information at parks throughout the summer season. Staff distributed and collected cards that asked for information to contact visitors.

Respondents were sampled by Montana State Parks staff during three data collections periods: an early season period (June 1-6), a mid-season period (June 30-July 12), and a late season period (August 20 – September 3). Table 8.1 below describes the sampling scheme used. BBER used the contact information cards to conduct telephone interviews with sampled park visitors. Park visitors completed 1,100 interviews: 573 with residents and 527 with nonresidents. The overall sampling error rate for this survey was +/- 3.0%. This means that if the survey were conducted 100 times, the proportions of responses found in 95 of the survey replications would be within 3% of those found by this survey. The sampling error rate was +/- 4.1% for residents and +/- 4.3% for nonresidents.

Table 8.1 In-park Sampling Plan

Data Collection Period	(Cards delivered to BBER per park				
	Reside	ent cards	Non -resident cards			
	Weekday	Weekend	Weekday	Weekend		
Field test*	5	5	5	5		
Early sample period	5	5	5	5		
Middle Sample period	5	5	5	5		
Late sample period	5	5	5	5		
* Collect everything possible from Smith River						

Survey Administration

The questionnaire was administered using a Computer-Assisted Telephone Interviewing (CATI) process during the period of June 1, 2010 through October 7, 2010. Bureau staff programed and validated the CATI system prior to survey administration. The interviews were conducted in the dedicated telephone interview facility at BBER. This state of the art facility contains twelve sound insulated telephone interview stations (expandable to twenty-four stations), plus viewing and monitoring capability for supervisors. The supervisor visually observed each interviewer and monitored selected telephone calls. Call monitoring is a vital quality control mechanism that reinforces data quality.

Each station is equipped with a telephone, headset, and computer, allowing CATI operation. The interviewers read the survey from the computer screen and directly entered the pre-coded responses into the computer, speeding the data capture process and minimizing the opportunity for errors.

The interviews were conducted using the Bureau cadre of trained and experienced telephone interviewers and shift supervisors. There are twenty-five interviewers with more than one year of experience, and several have been with the Bureau for ten years or longer. The shift supervisors are themselves seasoned interviewers with years of experience conducting surveys for a variety of organizations, including the US Bureau of the Census. New interviewers received classroom and "on the job" training, and were closely monitored by the shift supervisors.

Table 8.2 displays the number of interviews completed and the park the respondent visited.

Table 8.2 Number of Completed Interviews by Park

	Completed Interviews Nonresident				
	N	Resident N	Total N		
Total	527	573	1,100		
Bannack	21	15	36		
Beavertail Hill	27	19	46		
Big Arm	16	20	36		
Black Sandy	10	20	30		
Brush Lake	9	15	24		
Chief Plenty Coups	19	21	40		
Cooney	7	29	36		
Council Grove	4	23	27		
First Peoples Buffalo Jump	21	21	42		
Giant Springs	23	29	52		
Hell Creek	18	19	37		
Lake Elmo	14	16	30		
Lewis & Clark Caverns	17	19	36		
Logan	24	27	51		
Lone Pine	20	21	41		
Makoshika	30	26	56		
Missouri Headwaters	30	24	54		
Pictograph Cave	23	16	39		
Placid Lake	22	21	43		
Rosebud Battlefield	23	11	34		
Salmon Lake	16	27	43		
Sluice Boxes	15	28	43		
Smith River	22	31	53		
Tongue River	23	23	46		
Travelers Rest	16	14	30		
Wayfarers	31	19	50		
Whitefish Lake	26	19	45		

BBER and Montana State Parks documented case status in a manner that allows calculation and reporting of a unit response rate using the American Association for Public Opinion Research (2008) standard definition (RR1).³ The overall response rate for the survey was 54.8%. This response rate was calculated using the following formula:

In-park Cooperation Rate (80.2%) * Telephone Response Rate (68.4%) = Overall Response Rate (54.8%)

³ American Association for Public Opinion Research. 2008. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys.* 4rd edition. Lexana, Kansas: AAPOR.

Where:

- In-park Cooperation Rate = # contact cards returned / # of visitor intercepts
- Telephone Response Rate = # complete interviews / # complete interviews + # refusals + # non-interviews (answering machines, non-working numbers)

Table 8.3 below lists the nation or state of residence of each respondent and the number of respondents from that location.

Table 8.3 Residence of Respondents

Residence of Respondent				
Nation or		Nation or		
state	N	state	N	
Alberta, CAN	21	NC	4	
AK	3	ND	17	
AL	2	NE	2	
AZ	18	NH	1	
British Columbia, CAN	15	NJ	1	
CA	43	NM	4	
CO	29	NV	8	
СТ	3	NY	7	
DC	2	ОН	6	
FL	14	ОК	3	
GA	8	Ontario, CAN	4	
IA	6	OR	16	
ID	23	PA	8	
IL	11	Quebec, CAN	1	
IN	2	SD	12	
Ireland	1	Saskatchewan, CAN	4	
KS	7	Spain	1	
KY	4	TN	4	
LA	1	TX	11	
MA	7	England, UK	2	
MD	6	UT	6	
MI	8	VA	4	
MN	26	US Virgin	1	
		Islands		
MO	5	WA	77	
MS	2	WI	10	
MT	573	WV	1	
Northern Ireland, UK	1	WY	44	

Data Set Preparation and Reporting

Following collection the data were inspected to insure no duplicate cases were included and to correct any interviewer miskeys. Appropriate data labels were added. Appropriate composite variables and flags were added the data set to facilitate analysis. BBER produced a database of responses. The BBER team then tabulated the survey data and produced a report that documents survey results and methods. SPSS 19.0.0 for Windows released in fall 2010, including the Tables module, was used to conduct the analysis described in this report.

Post-stratification weights were applied to the data. This is a common data processing technique that has been shown to improve the accuracy of estimates. The data are weighted by 2009 and 2010 Montana State Parks counts of resident and nonresident park visitors.

Modeling Methodology

Both resident and nonresident state park visitors were sampled with respect to their estimated group expenditures in thirteen expenditure categories. In addition, information was collected by state park on average length of stay, number of visitors per group, and whether the resident or nonresident visitor was a day use visitor or overnight visitor. Expenditure information was further demarcated by spending at the park, or within 50 miles of it, and those expenditures incurred while visiting the state (outside the park area).

In order to model the impact of these expenditures, IMPLAN was used. IMPLAN is a well-respected model in economic impact analyses. Since its first inception in the 1970s, it has been through yearly revisions and modeling enhancements. Most recently, the model now has the ability to capture the effects of spending on surrounding regions. This enhancement proved particularly useful for modeling nonresident spending by Montana State Parks administrative region and its resulting impacts on the rest of the state.

Economic impacts modeled in this report are unique from an earlier study in several ways. First, the sample size collected allowed for Montana State Parks administrative region specific expenditure patterns by spending category. These refinements allowed for differences in average length of stay, number occupants per car (group size), expenditures, and day and overnight visitors. Second, new expenditure categories were isolated, specifically fees for museums and art galleries, recreation, and auto repair. Finally, the IMPLAN model itself provided an additional refinement to the modeling process in its ability to capture the spillover effects into the Montana economy resulting from spending by nonresident visitors in each administrative region.

Appendix: Questionnaire

			ıme is, l' h on Montana's		University of M	ontana in Missoula. V	Ve're
N	lay I speak witl	h	?				
E	1	Yes No	Ask Eligibility 1 Make appt.	ou go on the trip to sage 18 and older m		along with R? red. Are you 18 years	of age
		No	Proceed with Q1 If no, ask for adu participant, re-int	ılt trip			
s	Before we star hould come to	rt, I want a questi	to assure you t	ant to answer; just l	completely cor	IDENTS nfidential and volunta I we'll go on to the ne	
		e or prin	nformation abor cipal residence skip to 2	ut your trip to (<u>Park</u> ?	<u>)</u> . Did you start	your trip from your	
		n what c	•	d you start your trip ກ	from?		
2	. Where is you	r permar	nent home or pri city/town state	incipal residence? ก			
3	. About how m	any mile	s is it <u>one way</u> f <i>mil</i> es on	from where you star ne way	rted your trip to	(<u>Park</u>)?	
4	only des one of se	tination everal pla	skip to 5 aces/areas visited		s you visited or	n that trip?	
	1	Yes	orincipal destina → IF NO: 4c.	ation ? . What was your pri	ncipal destination	on?	
5		r first vis Yes No	it to the Park?				
6	Traveled	alone		vere there other pec	ople with you?		
	►6a. How	many p	eople traveled in	n your vehicle with	you, including y	ourself?	
			# people	a			

if MORE THAN 1
6b. Which category best describes the group you traveled with?
1 Couple
2 Family members
3 Group of friends
4 Family and friends
5 Organized group or club
6 Business associates
Now we'd like some information about the length of your trip. In this survey we will ask about (<u>Park</u>). We are also interested in the local area around (<u>Park</u>). For this survey, the local area is within 50 miles of (<u>Park</u>). 7. First, for how many total nights were you or your group away from your permanent residence on this trip?

8. How many total nights did your group stay in Montana on this trip? nights

9. How many nights did your group stay at (<u>Park</u>) or in the local area?
10. Please tell us whether any member of your group participated in the following recreational activities while at (Park) or in the local area.

while at (Park) or in the local area.			
		<u>Yes</u>	<u>No</u>
a. Fishing	1		0
b. Picnicking, day use	1		0
C1. Overnight camping except backpacking	1		0
	C2: Did you camp in a?		
C2. If C1 = Yes Ask:	Tent		1
	Camper or RV		2
d. Backpacking	Something else (specify)		₍)
e. Day hiking	3		
f. Wildlife watching, nature study			
g. Visiting scenic or historic sites, museums, etc		1	0
h. Entertainment activities, outdoor performances,		1	0
ceremonies, etc.	,		
i. Driving off-highway vehicles or motorcycles		1	0
j. Bicycling		1	0
k. Motor boating, waterskiing, jet skiing		1	0
I. Sailing, rafting, canoeing, floating, windsurfing		1	0
m. Swimming		1	0
n. Jogging, running		1	0
o. Horseback riding		1	0
q. Visiting friends or relatives, reunions		1	0
r. Dining for pleasure		1	0
s. Shopping		1	0
t. Tours or interpretive programs at the park?		1	0
u. Photography		1	0
v. Other (please describe)		1	0

11. During the time when you visited () State Park, d <u>Yes</u>	id you also vi: <u>No</u>	sit? <u>DK</u>
c. A national park in Montana (includes Yel (please specify)		0	8
e. A Montana city or town park (please specify)	1	0	8
f. Any other type of park or public lands? (please specify)	1	0	8
Now we'd like to ask some questions about you 12. How would you rate your overall satisfaction not at all satisfied and five is very satisfied. 1 Not at all satisfied 2 3 4		·	to five where one is
5 Very satisfied			
13. What did you like best about (Park)?			
14. What did you like least about (Park)?			

15. Next I'm going to list some features that may have been present in (Park). Please rate your satisfaction with each of these features on a scale from one to five where one is not at all satisfied and five is very satisfied. A Don't Know and Not Applicable options available but un-read

Not at all

Very

	<u>Satisfi</u>	<u>ed</u>		Sat	isfied	į
a. Roads	1	2	3	4	5	
b. Parking	1	2	3	4	5	
c. Trails	1	2	3	4	5	
d. Signs	1	2	3	4	5	
e. Interpretive displays	1	2	3	4	5	
f. Rest rooms	1	2	3	4	5	
g. Staff service	1	2	3	4	5	
h. Picnic area	1	2	3	4	5	
i. Campground	1	2	3	4	5	
k. Boat ramp	1	2	3	4	5	
I. Boat dock	1	2	3	4	5	
m. Beach	1	2	3	4	5	
o. Showers	1	2	3	4	5	
q. Electricity at Campsite	s 1	2	3	4	5	
r. Group use area	1	2	3	4	5	
s. Gift shop	1	2	3	4	5	
t. Cabins, yurts, tepees	1	2	3	4	5	

16. Next we'd like to ask you about some of the things you paid for on your trip. In particular, we'd like to know how much you spent for each of the following things while you were in Montana and while you were visiting **(Park)** OR its local area (within 50 miles of the park). Your best guess about the amount you spent is OK.

MI	Local Area
\$	\$
\$	\$
\$	\$
\$	\$
\$	\$
\$	\$
\$	\$
\$	\$
\$	\$
\$	\$ \$
\$	\$
\$	\$
\$	\$

The next set of questions asks about funding for Montana's state parks.

In an effort to maintain sites, provide better services and improve the operation of the state park system Montana State Parks would like your opinion on how to fund and operate state parks in the face of budget challenges. (Programming note: have this visible for interviewer reference throughout funding series)

20. ASK ONLY RESIDENTS. In 2003, an optional vehicle registration fee of \$4 annually was established to allow unlimited day use of Montana State Parks. Would you, yourself, support or oppose increasing the optional vehicle registration fee from \$4 to \$X? RANDOMLY ASSIGN A DOLLAR VALUE BETWEEN \$5.00 AND \$7.00.

Support 1 Oppose 0 DK 8

19/21. Like many businesses, Montana's State parks are facing some tough financial issues, and have taken cuts in budgets and staffing levels. If there is a need for additional cutbacks or funding, would you support or oppose a(n)...

Neutral 4 DK 98

IF SUPPORT: Do you support strongly 7, somewhat 6, or slightly 5? (#A) IF OPPOSE: Do you oppose strongly 1, somewhat 2, or slightly 3? (#B)

(Park system as a whole)

19a. Selling, closing or trading out some state parks that do not have regional or statewide significance?

19b. Privatizing state parks?

19c. Asking cities to take ownership of parks inside city limits

19d. Designating a portion of existing state taxes to parks?

19e. forming a statewide mill levy for state parks?

19f. Using corporations to increase advertising or partnerships?

(funding options)

19g. Enforcing user fee compliance more strictly?

19hg. Increasing user fees such as camping, nonresident entrance, and extra vehicle fees?

19i. Changing the optional Montana vehicle registration fee to a required fee?

19j. Charging additional fees for special events, interpretive talks, and other secondary items?

19k. during peak use periods, eliminating fee waivers and discounts for seniors?

19I. Creation of a "hardship pass" to help financially challenged Montana residents camp in a state park at a discounted rate.

19m. Increasing park revenues by expanded sale of items such as firewood, ice, T- shirts and artwork?

(Service levels and events)

19n. Increase use of volunteers?

19o. Laying off employees?

19p. Cutting back on public safety or enforcement of regulations (like quiet hours or littering)?

19q. Cut back on park maintenance and services?

19r. Cut back on hours at visitor centers?

19s. Cut back on interpretive and educational programs

21a. Cut back on special events

21b. Cut back on site improvements (such as building a restroom or boat ramp)?

21c. Cut back on historic resource management such as building stabilization and archaeological work?

The last few questions are for classification purposes only.

AGE. What was your age on your last birthday?

vears

EDUC. What is the highest degree or level of school you have completed?

- 1. Less than HS/GED
- 2. HS/GED
- 3. Some College/AA degree, ASSOCIATE
- 4. BA/BS
- 5. MA

6.PhD, M.D., J.D., etc.

7. professional MD. CPA, DDS, LAW

INCOME. Which of the following categories best describes your <u>total household income</u> from all sources in the year 2009 before taxes and other deductions?

100,000 dollars or more	1
Between 75,000 and 100,000 dollars	2
Between 50,000 and 75,000 dollars	3
Between 35,000 and 50,000 dollars	4
Between 20,000 and 35,000 dollars	5
Between 15,000 and 20,000 dollars	6
Between 10,000 and 15,000 dollars	7
Under 10,000 dollars	8
DK	98
REFUSED	99

Thank You Very Much for Your Time and Effort!

SEX. Complete after interview Respondent's Sex.

1 Female 0 Male